Chapter 1 Forest-wide Direction

Introduction

This chapter contains direction that applies Forest-wide, unless more stringent or restrictive direction is found in Chapter 2 or Chapter 3. Forest-wide direction includes Regional goals, Forest goals, objectives, desired condition statements, and standards and guidelines. Additional direction can be found in Appendices A, B, and C which reference national goals, policies, statutes, regulations, and agreements.

Goals and Objectives

Goals are broad statements which describe the conditions the Forest will strive to achieve. They are generally timeless and difficult to measure. Goals describe the ends to be achieved, rather than the means of doing so.

National goals can be found in Appendix A. The Regional goals listed below are described in more detail in the Amended Rocky Mountain Regional Guide, 1992. Forest goals, more specific than Regional goals, are developed to address local conditions and concerns.

Objectives are measurable steps taken to accomplish a goal. Objectives are generally achieved by implementing a project or activity. However, objectives are not targets. Targets are dependent upon budgets, which may or may not reflect forest plan emphasis areas.

Regional Goals

1. Protect the basic soil, air, and water resources.
2. Provide for multiple-uses and sustainability of National Forests and grasslands in an environmentally acceptable manner.
3. Provide for a variety of life through management of ecosystems.
4. Provide for scenic quality and a range of recreation opportunities which respond to the needs of National Forest customers and local communities.
5. Emphasize cooperation with individuals, organizations, and other agencies in coordination of planning and project implementation.
6. Promote rural development opportunities.
7. In cooperation with other landowners, strive for improved land ownership and access patterns to the mutual benefit of both the public and private landowners.
8. Improve financial efficiency for all programs and projects.

Forest Goals and Objectives

Goal 1 - Ecosystem management on the Routt National Forest shall provide for multiple-use outputs and the habitats and processes necessary to maintain the biological diversity found on the Forest.

Objectives

- Maintain soil productivity.
- Work cooperatively with National, State and local interests to protect water related values in perpetuity on National Forest System lands.
- Improve water quality, channel stability, and aquatic habitat in areas not meeting State water quality standards and in watersheds of concern and meet the anti-degradation clause of the Clean Water Act across the Forest.
- Avoid activities which contribute to air quality degradation and atmospheric deposition in the Mount Zirkel Wilderness.
- Conduct project analysis at the landscape scale, where appropriate.
- Maintain or create habitats suitable for a stable or increasing population of federally listed threatened and endangered species and Forest Service, Region 2 sensitive species for the Routt National Forest, including the Colorado River cutthroat trout.
- Limit the proliferation of undesirable nonnative plant and animal species through various activities and practices.

Goal 2 - Provide a wide variety of outdoor recreational opportunities and experiences to meet the full range of visitor expectations.

Objectives

- Identify appropriate programs and compatible levels of use for Forest recreation and resource programs in collaboration with user groups, communities, and other agencies.
- Provide Forest visitors with a full range of interpretive experiences.
- Provide recreation opportunities to accommodate a wide range of abilities.

Goal 3 - Cooperate with local governments and communities to develop opportunities that contribute to economic viability.

Objectives

- Support development and maintenance of a sustained flow of market and nonmarket products to regional and local economies.
- Develop programs and projects that are complementary to local community objectives and plans.
- Assist local governments in developing specific programs that promote economic stability.

Desired Condition of the Forest

The condition of the Routt National Forest will change as this Forest Plan is implemented. This section summarizes the desired condition of the overall Forest after 10 years and after 50 years of plan implementation. Chapters 2 and 3 of this plan also contain more detailed desired condition statements. Chapter 2 outlines the desired condition of each management area while Chapter 3 contains the desired condition direction for each Geographic Area.

The Forest in the Short Term

With the implementation of the Forest Plan, management actions will have been directed at achieving each of the three Forest-wide goals and associated objectives. The annual monitoring and evaluation program will be ongoing and have provided the tools needed to make sure each of these goals has been achieved to varying degrees.

At the end of the first decade, changes in the overall character of the landscape will be small. The Forest will appear very much as it does today. Subtle changes to the landscape will have been made through timber harvest, other vegetation treatments, road building, and natural disturbance processes.

A majority of the forest will be in late successional habitats, with a portion in early to mid successional habitats. Range vegetation will be mostly mid to late seral. The processes and structures necessary to maintain the biological diversity of the Forest will have been provided for across the landscape as a whole. Riparian areas will be in good or improving condition.

The character and qualities of the Routt National Forest which draw visitors will remain in place. Recreationists will continue to enjoy the scenery of both mountain forests and nonforested areas. A broad spectrum of recreation opportunities, ranging from primitive to developed, will be available. Information about recreation opportunities, the natural setting, and environment will be easily obtained.

A sustained flow of products will be available from the Forest. Collaborative planning efforts to develop projects and programs which promote local community stability will be ongoing with local community interests.

The Forest in the Long Term

After five decades of plan implementation, several changes will be apparent across the landscape. The vast majority of the forested areas will be in late successional habitats. Early and mid successional habitats will be found scattered across the landscape. These areas will have developed primarily through timber harvest and natural disturbance processes (fire, insects, and disease). While these natural disturbance events are not expected to be significant in the first decade, the possibility of large scale disturbance events will have increased with the passage of time. Some of the areas where timber harvest has occurred will now have a definite managed appearance. Areas of thinned trees will be visible, and some areas harvested in the 1950's will now be ready for harvest again. Biological diversity will continue to be maintained across the Forest. Range vegetation will be in mid to late seral stages. The majority of riparian areas across the Forest will be in a good condition.

The physical setting and scenic beauty of the Routt National Forest will continue to draw visitors. Recreation opportunities ranging from primitive to developed will be available. The Forest will also attract visitors because of its strong interpretive and environmental education programs. Many of the recreation facilities and opportunities will be maintained through collaborative partnerships.

The Routt National Forest will produce a sustained flow of forest products and other commodity outputs. Close collaborative relationships will be promoted with local communities and a cornerstone of the Forest's management.

Forest-wide Standards and Guidelines

This direction applies Forest-wide, unless more stringent or restrictive direction is found in management area prescriptions, Chapter 2, or geographic areas in Chapter 3 of this plan. Additional direction is found in Appendix B which references national and regional policies.

Standards are actions which must be followed or are required limits to activities in order to achieve forest goals. Deviations from standards must be analyzed and documented in a forest plan amendment.

Guidelines are advisable courses of action which should be followed to achieve forest goals but are optional. Deviations from guidelines must be analyzed during project level analysis and documented in a project decision document but do not require a forest plan amendment.

Physical

Air

Standards

1. Conduct all land management activities to comply with all applicable federal, state, and local air quality standards and regulations including:
    a. Federal: The Clean Air Act, as amended, 1990, (P.L. 95-95)
    b. State of Colorado: The Colorado Air Quality Control Act, Colorado Statutes 25-7-101 through 25-7-505

Mineral and Energy - Leasable Minerals

Standards

1. Recommend consent to lease with appropriate lease terms or stipulations, as set forth in the forest Oil and Gas Leasing Analysis Record of Decision and updated by this Forest Plan, the FEIS, and ROD.
2. Recommend against or deny consent to the Bureau of Land Management for issuance of leases, permits, or coal exploration licenses where operational damages to surface resources would not be reclaimed to acceptable conditions (per forest plan direction). Operational damages to surface resources include impacts from surface-based access, product transportation, and ancillary facilities necessary to production and related operations.

Mineral and Energy - Locatable Minerals

Standards

1. Provide permits for appropriate prospecting and collecting proposals for vertebrate fossils and minerals by noncommercial, scientific, or educational institutions, and provide appropriate opportunities for recreational collection of mineral and nonvertebrate fossil materials, where consistent with forest plan goals and objectives.
2. Allow rockhounding (hunting and collecting rocks and minerals) on National Forest System lands without a permit, except in designated wilderness, providing the activity does not interfere with existing rights and that specimens are used for personal, noncommercial uses.
3. Allow recreational panning, sluicing, and dredging outside of wilderness, where such activities do not interfere with the rights of mining claimants protected under the 1872 Mining Law. Evaluate these activities on a case-by-case basis to determine if an operating plan is needed by the authorized Forest Service official.

4. For designated wilderness, and "wild" segments of proposed wild and scenic rivers:

    a. For private land surface and mineral estate inholdings, provide for reasonable access of the type necessary to the purpose of proposed operations, and for restoration of disturbed federal lands to their natural condition when they are no longer needed for operations.

    b. For private mineral estates under the federal surface, provide for reasonable surface use as described in the ownership deed.

5. For other classified lands not withdrawn from operations under the general mining laws (research natural areas, national recreation areas, special interest areas such as scenic and geologic, national historical sites, and scenic and recreation segments of wild and scenic rivers) :

    a. Check the status of classified lands, with respect to withdrawal, before an operating plan is approved.

    b. Provide for reasonable protection of the purposes for which the lands were classified.

    c. Reclaim disturbed lands to a condition suitable for the purposes for which the lands were classified.

    d. Pursue withdrawals where required.

Mineral and Energy - Reserved and Outstanding Rights

Standards

1. Negotiate surface management for private oil and gas minerals with the owner and operator to be as close as possible to the standards used for federal minerals. Prohibiting such development is not an alternative.

Soils

Standards

1. Limit roads and other disturbed sites to the minimum feasible number, width, and total length consistent with the purpose of specific operations, local topography, and climate.
2. Construct roads and other disturbed sites to minimize sediment discharge into streams, lakes, and wetlands.
3. Stabilize and maintain roads and other disturbed sites during and after construction to control erosion.
4. Reclaim roads and other disturbed sites when use ends, as needed, to prevent resource damage.
5. Manage land treatments to limit the sum of severely burned and detrimentally compacted, eroded, and displaced land to no more than 15% of any land unit (FSH 2509.18).
6. Maintain or improve long-term levels of organic matter and nutrients on all lands.

Guidelines

1. Reduce resource damage and investment loss in areas that have a mass movement potential.
2. Perform an on-site slope stability examination on slopes over 30% prior to design of roads or activities that remove most or all of the timber canopy. Limit intensive ground-disturbing activities on unstable slopes identified during the examinations.

Water and Aquatic

Standards

1. Do not remove naturally occurring debris from stream channels unless it is a threat to life, property, or important resource values, or otherwise covered by legal agreement.
2. Manage land treatments to conserve site moisture and to protect long-term stream health from damage by increased runoff.

Water and Aquatic (continued)

3. Manage land treatments to maintain enough organic ground cover in each land unit to prevent harmful increased runoff.
4. In the water influence zone next to perennial and intermittent streams, lakes, and wetlands, allow only those land treatments that maintain or improve long-term stream health.
5. Design and construct all stream crossings and other instream structures to pass normal flows, withstand expected flood flows, and allow free movement of resident aquatic life.
6. Conduct actions so that stream pattern, geometry, and habitats are maintained or improved toward robust stream health.
7. Do not degrade ground cover, soil structure, water budgets, or flow patterns in wetlands.
8. Maintain enough water in perennial streams to sustain existing stream health. Return some water to dewatered perennial streams when needed and feasible.
9. Manage water-use facilities to prevent gully erosion of slopes and to prevent sediment and bank damage to streams.
10. Place new sources of chemical and pathogenic pollutants where such pollutants will not reach surface or ground water.
11. Apply runoff controls to disconnect new pollutant sources from surface and ground water.
12. Apply chemicals using methods which minimize risk of entry to surface and ground water.
13. To prevent conditions toxic to fish, avoid human-caused disturbances that result in suspended sediment peaks above 250 mg/l for more than one hour duration in any stream reach or of more than 500 mg/l at any point in time.
14. Maintain enough additional water in streams to sustain the water-dependent recreation values. Generally, Standard #8 provides for most recreation-related water uses, but additional water may be needed for special recreation features and heavy-use recreation areas.

Guidelines

1. Protect instream flows at outstanding recreation features. Such features include designated/study wild, scenic, or recreational rivers; stream segments used for commercial boating; stream segments having developed recreation sites or vistas; and national recreation/historic/scenic trails or scenic byways from which the segments are clearly visible. Protection of water quantity and quality is vital to recreation experiences. Refer to Table I-6 in FEIS Appendix I for listing of sites with outstanding recreation features.
2. For existing dams and diversions where water is being bypassed or returned to the stream and is available for recreation and aesthetic uses, secure and maintain these flows where needed.
3. For new dams and diversions, obtain bypass flows at the point of diversion or storage that protects water-dependent recreation values.

Biological

Biological Diversity

Standards

1. Develop prescriptions prior to timber harvest to identify the amount, size(s), and distribution of down logs and snags to be left on-site, as well as live, green replacement trees for future snags. On forest sites, retain snags and coarse woody debris (where materials are available) in accordance with the average minimums specified in Table 1-1.
2. Retain all soft (rotten) snags unless they are a safety hazard.
3. Use genetically local (at the sub-section level), native plant species for revegetation efforts where technically and economically feasible. Use weed-free seed mixtures. While native perennials are becoming established, nonnative annuals or sterile perennial species may be used to prevent soil erosion.

Guidelines

1. Maintain aspen, even at the expense of spruce/fir or other late-successional stands.

Table 1-1. Forest Minimum Requirements for Snag and Woody Debris Retention and Continuing Recruitment on Forested Sites following Timber Harvest*

	Snags			Down Logs	
Forest Type	**Minimum Diameter (inches)**	**Minimum Height (feet)**	**Retention Density (number per acres)**	**Minimum Diameter (inches)**	**Retention Density (linear feet per acre)**
Spruce/fir	10	25	1	10	50
Lodgepole pine	8	25	1	8	33
Aspen	8	25	1	8	33
Douglas-fir	10	25	1	10	50
Ponderosa pine	10	25	1	10	50

*These amounts are to be calculated as per-acre averages over a project area.
The appropriate distribution of down wood and snags will be prescribed during project development. More specific direction is found for 5.11 in that prescription.

Range

Standards

1. Provide mitigation measures to protect national forest resources from animal damage control activities conducted by other governmental entities. Mitigation measures emphasize protection of public safety; threatened, endangered, or sensitive species; water quality; and other resource values[1].
2. Phase out season-long grazing systems that allow for livestock grazing use in an individual unit during the entire vegetative growth period, except where determined to achieve or maintain the desired plant community.
3. Remove livestock from the grazing unit or allotment when further utilization on key areas will exceed allowable-use criteria in the forest plan or allotment management plan.
4. Manage all suitable rangeland to move toward satisfactory management status.
5. Manage rangeland vegetation for a mixture of seral stages. Manage vegetation to allow for successional progress towards a desired seral status.

Guidelines

1. Develop site-specific vegetation utilization and residue guidelines during rangeland planning, and document them in allotment management plans. In the absence of updated planning or an approved allotment management plan, apply the utilization and residue guidelines in Tables 1-2 and 1-3.
2. Manage sheep grazing to minimize trampling of vegetation and soil resources. Limit grazing to a "one time over" basis per area.

Table 1-2. Allowable Use Guidelines

Type of Management	Existing Rangeland Condition	
	Satisfactory*	Unsatisfactory*
Season-long	30-40%	0-30%
Deferred rotation	40-50%	35-45%
Rest rotation	45-55%	35-45%

*Percent Utilization (Note: When range trend is declining the lower range of percentages are generally applied)

[1] *Animal Damage Control of the Animal Plant Health Inspection Service (USDA) is responsible for completing the necessary National Environmental Policy Act (NEPA) analysis for predator control activities. This is consistent with Forest Service policy based on and agreed to in a Memorandum of Understanding Agreement between the USFS and ADC-APHIS signed in 1993. The MOU requires that predator control activities conducted by APHIS-ADC be consistent with the Land and Resource Management Plan.*

Range (continued)

Table 1-3. Riparian Vegetation Residue Allowances		
Season of Use	Existing Rangeland Condition	
	Satisfactory*	Unsatisfactory*
Spring Use Pasture	4 Inches	6 inches
Summer & Fall Use Pasture	6 Inches	6 Inches

* Riparian vegetation species are plants that require some free water within their rooting zone to grow. Typical riparian species are sedges and rushes.

Silviculture

Standards

1. Use a 40-acre maximum size for openings created by even-age management, regardless of forest type, with the following exceptions:
    a. Where proposals for larger openings are approved by the Regional Forester after a 60-day public review.
    b. Where larger openings are the result of natural catastrophic conditions of fire, insect or disease attack, or windstorm.
    c. Where the area that is cut does not meet the definition of created openings.
2. Use the scientifically defined silviculture systems which meet the management objectives for the landscape or individual stands of trees within a landscape setting. These systems are shown, by forest cover type, in Table 1-4. Both even-aged and uneven-aged management systems can be used and applied at scales ranging from a few acres to hundreds of acres. Apply these silvicultural systems in a manner that will ensure natural regeneration where artificial regeneration is not necessary for other resource objectives. Have certified silviculturists approve tree stand vegetation management treatments. The silvicultural systems identified below can be used to convert uneven-aged stands to even-aged management and even-aged stands to uneven-aged management.

Silviculture (continued)

Table 1-4. Appropriate Silviculture Systems by Forest Cover Type

Forest Cover Type	Even-aged	Two-aged	Uneven-aged
Ponderosa pine	Shelterwood Clearcut Seed-Tree	Irregular Shelterwood	Group Selection Single-Tree Selection
Mixed Conifer	Shelterwood Clearcut Seed-Tree	Irregular Shelterwood	Group Selection Single-Tree Selection
Aspen	Coppice\1	Coppice With Standards\2	Group Selection\3
Lodgepole pine	Shelterwood Clearcut Seed-Tree	Irregular Shelterwood	Group Selection
Engelmann spruce/ Subapline Fir	Shelterwood Clearcut	Irregular Shelterwood	Group Selection Single-Tree Selection

\1 Coppice is a vegetation reproduction method used with clearcutting. Clearcutting stimulates sprouting from the residual roots.

\2 Standards are selected overstory trees reserved for a longer rotation at the time each crop of coppice material is cut.

\3 Use of group selection as an appropriate silviculture system in aspen is currently under study to determine regeneration success but is authorized on a test basis.

3. Base the size of the uncut forest areas between openings on the management objectives for the landscape unit being analyzed. If these objectives include creating a mix of vegetation types to benefit the kinds of wildlife associated with early successional stages and edges, the uncut units can be small. If the objectives include provisions for old-growth associated species, the uncut units should be large enough to function as an ecological system not overly influenced by edge.

4. When trees are harvested on suitable lands, the cutting should be made in such a way that there is the assurance that the technology and knowledge exist to adequately restock these areas with trees within five years after final harvest. Minimum restocking levels are defined in Table 1-5.

Table 1-5. Standard for the Required Minimum Numbers of Seedlings for Adequate Regeneration Restocking of a Cutover site

Species	Spruce/Fir	Aspen	Lodgepole pine	Ponderosa pine	Other Softwood	Other Hardwood
Trees per Acre	150	300	150	150	150	300

5. Use artificial regeneration methods when it is unreliable to count on the natural sequence of events or environmental conditions to regenerate the stand within 5 years.

6. Five years after final harvest means 5 years after clearcutting, 5 years after the final overstory removal in the shelterwood and seed tree systems, or 5 years after selection cutting. The requirement for adequate restocking within 5 years is initiated by the final harvest. The timing of first and third year restocking surveys is initiated by the reforestation treatment.

7. No minimum seedling height requirements are specified. Seedlings must have survived a minimum of one year and be expected (on the basis of research and experience) to be able to produce the desired future stand condition specified for the area in the forest plan. The number of seedlings in Table 1-5 represents the minimum

number of seedlings required, considering natural mortality, to produce a merchantable timber stand at rotation age, without intermediate treatments.

8. In order to assure that adequate restocking of openings created as a result of final harvest is accomplished, as a minimum, conduct stocking surveys at the end of the first and third growing seasons, following reforestation treatment. Adequate stocking cannot be certified until after the third year growing season survey.

9. Where disease can be spread from an uncut stand to a newly regenerated stand, it is desirable to cut the adjacent infected stand before the newly regenerated stand reaches a height of 6 feet.

10. Leave large woody debris on harvested or thinned sites to help retain moisture, trap soil movement, provide microsites for establishment of forbs, grasses, shrubs and trees, and to provide habitat for wildlife.

11 When trees are to be harvested on other than suitable lands, exceptions to the 5-year restocking standard are appropriate as documented in project decisions when the harvest meets one of the following criteria:

   a. for permanent openings that serve specific management direction,

   b. where provided for in specific management practices and prescriptions,

   c. where it is desirable to delay the onset of regeneration and crown closure to meet specific desired conditions and management objectives.

Guidelines

1. If the silviculture system being applied to a particular area of the landscape is uneven-aged, designate harvest trees for commercial timber production based on the desired density as determined by age class or size and the objective for the area.

2. Silvicultural standards and guidelines should be applied at the watershed and landscape level, as well as to individual stands of trees. The standards and guidelines must be applied to perpetuate this range of environmental conditions while supplying goods and services to people.

3. Do not consider artificially created openings as openings when the trees average 6 feet in height and have reached a density listed in Table 1-5.

4. The landscape should be the primary unit of analysis for silviculture. A landscape is defined as a distinct landform, such as a mesa, or a 4th-order watershed. There is a great variety of landscape types within the region. Some landscapes may contain more than a single forest species. Some landscapes are fine-grained, characterized by many small areas in various stages of plant succession. Others are large-grained, characteristically forested with large, unbroken expanses of trees and few openings. There are areas in the region which have become a patchwork of forest and open places as a result of human use prior to establishment of national forests, past Forest Service management practices, and natural disturbances (wind, fire, insect activity, and earth movement).

5. In most circumstances, use silviculture systems which ensure regeneration of forest stands through natural seeding and suckering.

6. Use thinning practices which consider genetic diversity, competition among trees for water, nutrients, and light. The frequency of thinning should depend upon the tree species, financial efficiency, and the site growing conditions.

7. Where appropriate, reduce competition between desired trees and other vegetation.

8. Except for treatments designed to enhance meadows, avoid altering more than one-third of the edge of a natural opening whenever an artificially created opening lies adjacent to a natural opening. Additional edge should not be created until previously treated areas are considered closed.

9. The choice of a silviculture system should allow emulation of the pattern, timing, and frequency of natural disturbances found in the landscape being treated.

10. Regeneration harvests of even-aged timber stands should not be undertaken until the stands have generally reached or surpassed 95% culmination of the mean annual increment measured in cubic feet. Exceptions may be made where resource management objectives or special resource considerations require earlier harvest such as:

a. Stands which are in imminent danger from insect or disease attack.

b. Wildlife habitat improvement.

c. Scenery resource enhancement or rehabilitation.

d. Ecosystem restoration.

e. Areas managed for Christmas tree production.

11. Design silvicultural prescriptions for existing regenerated stands within riparian management zones to achieve riparian goals.

12. No minimum or maximum stand acreage size limits should be applied where an uneven-aged structure can be maintained throughout.

Threatened, Endangered, Sensitive Species, and Wildlife

Standards

1. Apply seasonal restrictions on use of travelways under Forest Service jurisdiction to reduce disturbance in sensitive big game areas, such as birthing areas and winter ranges. This does not imply that all birthing areas and winter range are considered equally important, and not all will be considered "sensitive."
2. Manage human disturbance at caves and abandoned mines where bat populations exist. When closing mines or caves for safety or protection reasons, reduce disturbance to resident bat populations and provide access for bats.
3. Provide adequate cover to maintain screening, through time, along roads where timber management activities are taking place to minimize disturbance and harassment of deer and elk.
4. In areas where tall dense cover is desired for ground-nesting birds, retain adequate residual cover from previous growing seasons since some species begin nesting in April and May before spring growth.
5. Some bird species prefer to nest in undisturbed cover. In areas where these species are a primary consideration, manage livestock grazing to avoid adverse impacts to nesting habitat.
6. Protect known active and inactive raptor nest areas. Extent of the protection will be based on proposed management activities, human activities existing before nest establishment, species, topography, vegetative cover, and other factors. A no-disturbance buffer around active nest sites will be required from nest-site selection to fledging (generally March through July). Exceptions may occur when animals are adapted to human activity.
7. Where newly discovered threatened, endangered, proposed, or sensitive species habitat is identified, conduct an analysis to determine if any adjustments in the forest plan are needed.
8. Manage activities to avoid disturbance to sensitive species which would result in a trend toward Federal listing or loss of population viability. The protection will vary depending on the species, potential for disturbance, topography, location of important habitat components, and other pertinent factors. Give special attention during breeding, young rearing, and other times which are critical to survival of both flora and fauna.
9. Avoid disturbing threatened, endangered, and proposed species (both flora and fauna) during breeding, young rearing, or at other times critical to survival by closing areas to activities. Exceptions may occur when individuals are adapted to human activity, or the activities are not considered a threat.
10. In forested ecosystems, maintain habitat effectiveness for deer and elk at 50% or greater, as measured at the Geographic Area scale.
11. Restrict new developments, including new facilities, roads and trails, and concentrations of humans, within a one-mile sight distance of bighorn sheep lambing and mountain goat kidding areas if they would adversely impact lambing or kidding. Restrictions on activities are usually required from April 1 to June 30.
12. Prevent interaction between bighorn sheep and domestic sheep, where feasible.

Guidelines

1. Protect wildlife habitat values when enhancing watchable wildlife opportunities for the public.

Disturbance Processes

Fire

Guidelines

1. When feasible and appropriate, use broadcast burning to dispose of slash in order to return the inorganic and organic chemicals in the foliage and small woody material to the soil, to reduce fire hazard, and to provide seed beds for natural regeneration.

Insects and Disease

Guidelines

1. Plan management activities with consideration for potential insect or disease outbreaks. Design management to meet or enhance management area objectives.
2. Manage vegetation in high-use recreation areas to provide for public safety, to improve forest health, and to maintain or improve the desired recreation setting(s).
3. Use integrated pest management techniques, including silvicultural treatments, to meet management area objectives. Treatment activities will be based on values of, and risks to, wildlife habitat and adjacent private lands, as well as public land. Priority should be given to areas in which values to be protected exceed the cost of protection; for example, areas adjacent to subdivisions, metropolitan areas, recreation sites, or areas of concentrated public use.
4. Use preventative vegetation management practices to meet objectives and reduce the risk of insects and disease. Give priority to cover types identified as high risk.
5. In project plans, consider existing infestations of insects or disease within the project area. Design activities to minimize the risk of spreading the infestation while still providing habitat for those wildlife species dependent upon the presence of insects and disease.

Undesirable Species

Standards

1. Control nonnative and noxious plants throughout the Forest, with priority given to designated wilderness.
2. Use only certified noxious weed free hay, seed, straw, or other materials for feed or revegetation projects on the Forest.

Guidelines

1. Develop a noxious weed and pest management program that addresses awareness, prevention, inventory, planning, treatment, monitoring, reporting, and management objectives. Priorities for implementing a program for undesirable plants include:
    a. New invaders.
    b. New areas.
    c. Spreading or expanding infestations.
    d. Existing infestations.

Social

Heritage

Standard

1. Conduct all land management activities to comply with all applicable federal, state, and local regulations. Heritage resource values can be protected effectively through application of the provisions of the following Acts:
    - The National Historic Preservation Act
    - Native American Grave Protection and Repatriation Act
    - American Religious Freedom Act

Recreation - General

Standards

1. Base availability of outfitter/guide special-use permits on a capacity study.
2. Do not issue further permits when capacity has been met for a certain special-use activity.
3. Require valid advanced first-aid certification or equivalent approved qualifications from all outfitter/guides conducting activities with high-risk or frequency of serious injury, such as snowmobiling, whitewater boating, etc..
4. Allow mountain bikes on roads and trails Forest-wide (outside of wilderness), unless prohibited.

Guidelines

1. Consider concessionaire operations where appropriate.
2. Use Tread Lightly and Leave No Trace techniques in education and interpretation.

Recreation - Developed Recreation

Standards

1. Design and manage developed recreation sites according to the adopted recreation opportunity spectrum class and the adopted visual quality objective(s).
2. Provide a range of universally accessible opportunities, within the limits of the site characteristics, at all new or reconstructed developed recreation sites.
3. Develop and maintain vegetative management plans for all developed sites to enhance the natural setting and maintain or develop the desired vegetation.
4. Set camping stay limits to meet management objectives.
5. Withdraw developed recreation areas from locatable mineral entry.
6. Provide parking, trailhead panels for trail information/interpretation, and appropriate sanitation facilities at trailheads. Construct these facilities to be consistent with the recreation setting.

Guidelines

1. Consider standard design of facilities when constructing or reconstructing recreation sites. Design quality facilities that require low maintenance, are cost effective, and include universal design concepts.
2. When campground occupancy averages less than 20% during normal operating season, conduct an analysis to decide whether to close the campground.
3. When determining opening and closing dates for campgrounds, consider the following:

a. Use and demand.

b. Budget constraints.

c. Weather, site, and road conditions.

d. Popularity.

e. Impacts to dispersed sites.

f. Adjacent available facilities.

g. Concessionaire's needs.

h. The role of volunteers.

4. When offering less than full service, use the following priorities for allocation of funds:

a. Health and cleanliness.

b. Safety and security.

c. Presence of a campground host or patrols.

d. Heavy maintenance needs.

e. Amount of use.

5. Where it is not possible to screen them, design recreational facilities to blend with the elements found in the natural landscape. They should remain subordinate to the overall visual strength of the surrounding landscape.

6. Have each ranger district document backlog maintenance and rehabilitation needs and associated costs and update at intervals not exceeding 2 years.

7. Provide readily available off-site and on-site information on recreation opportunities for developed sites.

Recreation - Dispersed Recreation

Standards

1. Close or rehabilitate dispersed sites or otherwise mitigate impacts when:

a. Campsite condition reaches Cole's class "heavy" or "severe."

b. Site occupancy does not meet the adopted visual quality objective.

c. Documented social use conflicts exist.

d. Unacceptable environmental damage is occurring.

2. Where forage is limited, require users camping overnight with recreational livestock to carry cubed, pelleted, or rolled feed free of viable noxious weed seeds.

3. Only allow camping outside a 100-foot zone surrounding lakes and streams, unless otherwise designated.

Recreation - Dispersed Recreation (continued)

Guidelines

1. Manage recreation use to stay within the capacity for the recreation opportunity spectrum objective shown in Table 1-6.

Table 1-6. Maximum Use and Capacity Levels for Each Recreation Opportunity Spectrum Class

ROS Class/Capacity Range	Very Low*	Low*	Moderate*	High*
Primitive				
On Trails - PAOT**/mile	0.5	1.0	2.0	3.0
Area Wide - PAOT/M Acres	1.0	2.0	7.0	25.0
Semi-primitive, Nonmotorized				
On Trails - PAOT/mile	2.0	3.0	9.0	11.0
Area Wide - PAOT/M Acres	4.0	8.0	50.0	80.0
Semi-primitive, Motorized				
On Trails - PAOT/mile	2.0	3.0	9.0	11.0
Area Wide - PAOT/M Acres	4.0	8.0	10.0	40.0
Roaded Natural				
On Trails - PAOT/mile	2.0	3.0	9.0	11.0
Area Wide - PAOT/M Acres	40.0	80.0	1,200.0	2,500.0
Rural				
On Trails - PAOT/mile	2.0	3.0	9.0	11.0
Area Wide - PAOT/M Acres	500.0	800.0	5,000.0	7,500.0

***Very Low** and **Low** apply to rock, mountain grass, and clearcuts 1-20 years old.
Moderate applies to mountain grass, mature and pole-size ponderosa pine, mature aspen, shelterwood cuts 90-120 years old, selection cuts 1-20 years old, and clearcuts 80-120 years old.
High applies to mature and pole-size spruce, pole-size aspen, and clearcuts 20-80 years old.

****PAOT** = Persons at one time

2. If use exceeds the area capacity for a given ROS class, employ the following management actions, in order of priority, to address the impacts or effects to the recreation setting:
    a. Inform the public and restore or rehabilitate the site.
    b. Regulate use.
    c. Restrict the number of users.
    d. Close the site.
3. Manage trail development at a broad scale to coordinate with trail systems developed by municipalities, counties, states, other federal agencies, and partners.
4. Plan different accessibility challenge levels, depending on the nature of the improvement and the principal form of recreation being provided.
5. Consider universal design for all new construction or rehabilitation proposals in trail system analyses and decisions.

Recreation - Dispersed Recreation (continued)

6. Consider the following in new trail construction:
    a. Proximity to population centers.
    b. Feasibility of loop trails.
    c. Feature attractions, campgrounds, and interpretive opportunities.
    d. Types of trail users to be served.
    e. Partnership opportunities.
    f. Protection of habitats and wilderness.
    g. Accessibility or universal design opportunities.
7. Give higher priority for reconstruction, operation, and maintenance to Congressionally-designated national historic, scenic, or recreation trails and the Colorado Trail (Reference FSM 2352.3 and 2353.4).

Scenery Management

Standards

1. Apply the Visual Management System (VMS) to all NFS lands. Travel routes, use areas, and water bodies determined to be of primary importance are sensitivity level one and appropriate visual quality objectives are established according to the VMS.
2. Prohibit management activities which are inconsistent with the visual quality objective unless a decision is made to change the visual quality objective. Document the decision to change the visual quality objective in a project-level NEPA decision document.

Guidelines

1. Rehabilitate all existing projects and areas that do not meet the visual quality objectives specified for each management area prescription. Consider the following when setting priorities for rehabilitation:
    a. Relative importance of the area and the amount of deviation from the visual quality objectives.
    b. Length of time it will take natural processes to reduce the visual impacts so that they meet the visual quality objective.
    c. Length of time it will take rehabilitation measures to meet the visual quality objectives.
    d. Benefits to other resource management objectives to accomplish rehabilitation.
2. Meet the visual quality objectives of retention and partial retention in one year after completion of a project. Meet the modification visual quality objective in three years after completion of a project.

Recreation Opportunity Spectrum

Standards

1. Conduct management activities to comply with the requirements of the adopted ROS class and the visual quality objective in the management area prescription.

Wilderness

Standards

1. Prohibit recreational livestock within 100 feet of lake shores and streambanks, except during watering and through travel.
2. Implement a permit system (for either day-use or overnight-use) or other measures, such as area closures, to manage use-levels and use-patterns when conditions are outside the standards and guidelines established for the management area prescription.

3. In pristine management areas of a wilderness, do not reduce the standard of naturalness in order to disperse recreation use from other portions of the wilderness.
4. Limit the maximum party-size to 25 people, recreational stock, or combination thereof. Establish smaller party-size limits for people and stock where biological and physical resource capability cannot support that level of use. Issue permits on a case-by-case basis for parties that are larger than established limits, when the use is compatible with other wilderness management objectives.
5. Prohibit pets from harassing wildlife or other people. Voice control or physical restraints are acceptable.
6. Do not develop specific trail improvement work to reduce the level of challenge to accommodate the disabled within wilderness areas.
7. Use natural-appearing techniques to protect wetlands if alternate trail locations are unavailable.
8. Prohibit construction of new facilities or structures. Do not replace existing facilities if they become uninhabitable or are substantially damaged.
9. Permit only those uses authorized by wilderness legislation which cannot be reasonably met on nonwilderness lands.
10. Manage special-uses to minimize impact on wilderness values.

Guidelines

1. Control natural insect and disease outbreaks in wilderness only when justified by predicted loss of resource values outside of wilderness.
2. Refer to the Animal Damage Management annual work plan for control of problem wild animals.
3. Manage wildfires in accordance with an approved wilderness fire management plan.
4. Prohibit trailing of permitted livestock unless there is no feasible alternative access to an allotment.
5. Meet the current visual quality objective of preservation.
6. Vegetative restoration projects may be needed where human activities have altered natural ecosystems, and there is no reasonable expectation of natural revegetation. Use native species in restoration efforts. Where nonnative species must be used, select plants based on the likelihood that they will not persist beyond the rehabilitation period.
7. Minimize human impacts in wilderness using the following actions:
    a. Limiting the number of private and outfitter/guide camps.
    b. Encouraging the use of self-contained stoves and discourage the use of wood-fueled fires.
    c. Using a permit system.
    d. Limiting party size and number of pack animals.
    e. Prohibiting dogs or requiring all dogs to be on a leash.
    f. Implementing minimum impact suppression tactics when managing wildfires.
8. Provide interpretive information using brochures or signs located outside the wilderness, rather than on-site signing.

Administrative

Infrastructure - Facilities

Standards

1. Do not retain facilities acquired from land donation, exchange, or purchase unless they serve a definite future purpose and funding is available for their maintenance.

Infrastructure - Travelways

Standards

1. Use restricted roads for administrative purposes when:
    a. Prescribed in management prescriptions.
    b. Authorized by the Deciding Officer.
    c. In case of emergency.
2. Allow motorized use on new or designated travelways (see Glossary) unless a documented decision shows that:
    a. Motorized use conflicts with the purpose for which the travelways were constructed.
    b. Motorized use is incompatible with the ROS class.
    c. Travelways are located in areas closed to motorized use and are not "designated routes."
    d. Motorized use creates user conflicts that result in unsafe conditions unrelated to weather.
    e. Physical characteristics of travelways preclude any form of motorized use.
    f. Travelways do not serve an existing or identified future public need.
    g. Financing is not available for maintenance necessary to protect resources.
3. Prohibit all summer motorized use in Management Areas 1.11, 1.12, 1.13, 1.32, 2.2, and 8.22.
4. Prohibit motorized use with wheeled vehicles on lands outside designated travelways unless a forest order indicates that such use is specifically allowed.
5. Prohibit winter motorized use in Management Areas 1.11, 1.12, 1.13, 1.5, 2.2, 5.41, and 8.22. Allow motorized use in the remaining areas, unless restricted in the future following site-specific analysis.
6. Prohibit motorized access from private land where access for the general public is not available, except by special permit.

Guidelines

1. Consider developing new trail systems that expand the range of recreation opportunities, provide for user safety, and disperse existing use into different areas.
2. Obliterate, revegetate and slope to drain those system travelways which are no longer needed to achieve management objectives or where resource damage cannot be mitigated.
3. Manage motorized use by seasonal use restriction if:
    a. Use causes unacceptable damage to soil and water resources due to weather or seasonal conditions
    b. Use causes unacceptable wildlife conflict or habitat degradation
    c. Use results in unsafe conditions due to weather conditions
    d. The road or trail serves a seasonal public or administration need

e. The area accessed has seasonal need for protection or nonuse.

f. Competing uses create conflicts.

4. Do not cross new roads or trails which are restricted with roads or trails open to motorized vehicles. If this cannot be avoided, provide adequate signing, closure devices, or both to clearly distinguish the open routes from the closed routes .

5. Provide a wide range of recreation opportunities and difficulty levels, both motorized and nonmotorized, with the trail systems.

   a. With conflicting uses, decide which trails are available for separate uses and which are to be shared. Where clearly necessary, trails may be dedicated to a single use to resolve conflicts,

   b. Consider a wide range of universally accessible opportunities for all new construction or rehabilitation proposals.

   c. Clearly indicate the appropriate modes of travel at each trailhead.

Real Estate - Land Adjustments

Standards

1. In land adjustment activities, give priority to acquiring lands that contain habitat identified by Fish and Wildlife Service as necessary for recovery of federally listed threatened and endangered species.

2. In land adjustment activities including land exchange, purchase, disposal, and donation, consider the following:

   a. Evaluate and balance the overall combination of all resource values and factors including wildlife habitat, fisheries habitat, riparian areas, wetlands, cultural resources, recreation opportunities, scenic value, watershed protection, timber resources, rangelands, public access, better federal land management, and other factors. In all land adjustment activities, consider the important impacts to issues and resources identified during site-specific scoping.

   b. Consider the effect of land adjustments on sensitive species habitat. Avoid land adjustments which could result in a trend toward federal listing or loss of population viability for any sensitive species. Ownership of sensitive species habitat can be conveyed if conveyance would not result in a trend toward federal listing or adversely impact the population viability of the species or if effects could be mitigated.

   c. Acquire lands that contain resource values identified during scoping as important in contributing toward national forest system resource management goals and objectives as stated in the forest plan. Examples include: wetlands, riparian areas, essential wildlife habitat, threatened or endangered species habitat, sensitive species habitat, significant cultural resources, timber lands, rangelands, or other areas.

Guidelines

1. Consider the following when disposing of federal lands or acquiring nonfederal lands by purchase or exchange:

   a. Reduction of Forest Service administrative costs and improvement of management efficiency. This includes: reducing miles of landline boundaries and number of corners, special-uses, title claims, rights-of-way grants and easements, numbers of allotments and intermingled ownership livestock pastures, and other factors which decrease administrative costs and improve management efficiency.

   b. Reduction of conflicts between Forest Service and private landowner objectives, especially when conflicts are adversely impacting National Forest System management.

Real Estate - Rights-of-way

Standards

1. Retain existing access rights, where needed, to meet forest plan goals and objectives.

Special-Uses - General

Standards

1. When the permit expires, phase out current uses and do not approve new uses where the primary activity is storage or disposal of hazardous materials, including landfills.

Utility Corridors

Standards

1. Conserve existing and designated inventoried rights-of-way needed for implementation of the forest plan.
2. Authorize proposals to utilize designated utility corridors without alternative route analysis, subject to site-specific environmental analysis.
3. Do not authorize conflicting uses or activities within transportation and utility corridors.
4. Bury electrical utility lines of 33 kilovolts or less, and telephone lines, unless one or more of the following applies:
    a. Visual quality objectives of the area can be met using an overhead line.
    b. Burial is not feasible due to geologic hazard or unfavorable geologic conditions.
    c. Greater long-term site disturbance would result.
    d. It is not technically feasible.

Guidelines

1. Consolidate occupancy of transportation or utility corridors and sites wherever possible and compatible.
2. To the extent possible, manage activities within linear corridors to be compatible with the goals of the individual management area prescriptions through which corridors pass.
3. Ensure utility corridors are consistent between adjoining forests, regions and other federal and state land management agencies.
4. Utilize current utility corridors fully. Provide corridors in the future in areas which meet the needs of society while protecting the integrity of the environment

Economic

Timber Utilization

Standards

1. Use the utilization standards for live and dead trees shown in Table 1-7.

Table 1-7. Timber Utilization Standards

Products and Species	DBH DBH-DOB Inches	Piece Units Feet	DIB Small End Top-DIB Inches
Live Trees			
Sawlogs All Conifers	7.0	8	6.0
Products other than sawlogs > 5" DBH All	5.0	8 1/3	4.0
Products other than sawlogs < 5" DBH All	*Variable	Variable	*Variable
Dead Trees			
Sawlogs -Lodgepole pine -All other conifer	 8.0 10.0	 16 16	 7.0 8.0
Products other than sawlogs - All	*Variable	Variable	*Variable

* Variable depending upon products which are being appraised.
Reference MBR Supplement 2409.18-97-2 effective 05/01/97 to FSH 2409.18 - Timber Sale Preparation Handbook.